



**UNITED STATES DEPARTMENT OF COMMERCE**  
**United States Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

NH

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/331,829 06/23/99 SUZUKI

H 1576.77

WILLIAM G CONGER  
BROOKS & KUSHMAN P C  
1000 TOWN CENTER  
TWENTY-SECOND FLOOR  
SOUTHFIELD MI 48075

IM52/0614

EXAMINER

SELLERS, R

ART UNIT

PAPER NUMBER

1712

DATE MAILED:

06/14/01

15

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/331,829

Applicant(s)

SUZUKI ET AL.

Examiner

Robert Sellers

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_

- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_

The 35 U.S.C. 112, second paragraph, rejection is rescinded since the language of claims 1 and 2 indicating the compound other than the tetrakisphenol, which reacts with the epoxy groups of the epoxy resin to cure the resin merely denotes the potential reactivity of the clathrate and does not affirmatively define the presence of the epoxy resin with the clathrate.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2 and 5 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 2 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2, lines 9-11 defines "a compound accelerating the curing of a compound other than the tetrakisphenol compound, which reacts with epoxy groups of an epoxy resin to cure the resin." The phrase "a compound accelerating the curing of a compound other than the tetrakisphenol compound" is confusing since it seems to indicate the presence of 1) an accelerator compound and 2) a curing compound other than the accelerator compound.

Page 6, lines 15-17; page 7, lines 7-9 and page 12, lines 5-7 disclose similar language. However, page 10, lines 11-12 and page 21, Example 1 describe a tetrakisphenol compound forming a clathrate with the curative or the curing accelerator, thereby denoting a single accelerator compound reacted with the tetrakisphenol to synthesize the clathrate.

A curing accelerator is a compound which reduces the reaction time without substantial participation in the curing reaction which contradicts the phrase "which reacts with the epoxy groups of an epoxy resin to cure the resin" in claim 2, lines 10-11.

The clathrate curing accelerator would be more concisely defined on pages 6, 7 and 12 as well as claim 2 via the language, "a compound other than the tetrakisphenol compound which accelerates the curing of an epoxy resin."

The text of section 103 of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Nos. 5-194711 and 6-329570 and Asai et al.

The rejection is maintained for the reasons of record set forth in the previous Office action. The arguments filed June 7, 2001 have been considered but are unpersuasive.

There has been no notation that "each of these references are totally defective in failing to teach or suggest the combined components of applicants invention (amendment, page 4, lines 9-11)." The motivation to employ the clathrates of

Application/Control Number: 09/331,829  
Art Unit: 1712

Japanese '570 and Asai et al. as epoxy curatives resides in Japanese '711 wherein lengthened pot life is directly attributed to a hardener or accelerator for epoxy resins enclosed within a hydroxy-functional compound (translation, page 7, paragraph 4 and page 10, paragraph 9).

It would have been obvious to employ the clathrates of a nitrogen-containing heterocyclic compound of Japanese '570 and Asai et al. which embraces the heterocyclic polyamine hardener (page 8, paragraph 6) or imidazole (page 10, lines 12-17) of Japanese '711 as an epoxy resin hardener or accelerator in order to enhance the chemical stability (Japanese '570), facilitate activation by heating (col. 14, lines 33-35 and reduce the toxicity (col. 14, lines 42-44).

The amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

(703) 308-2399 (Fax no. (703) 872-9311)

 rs 6/13/01

ROBERT E.L. SELLERS  
PRIMARY EXAMINER